



Public Health Services COVID-19 Situation Report & Organizational Update

Board of Health
December 6, 2021

Overview

1. Overall Status
2. COVID-19 Situation Report
3. Scarsin Forecast
4. COVID-19 Vaccine Update

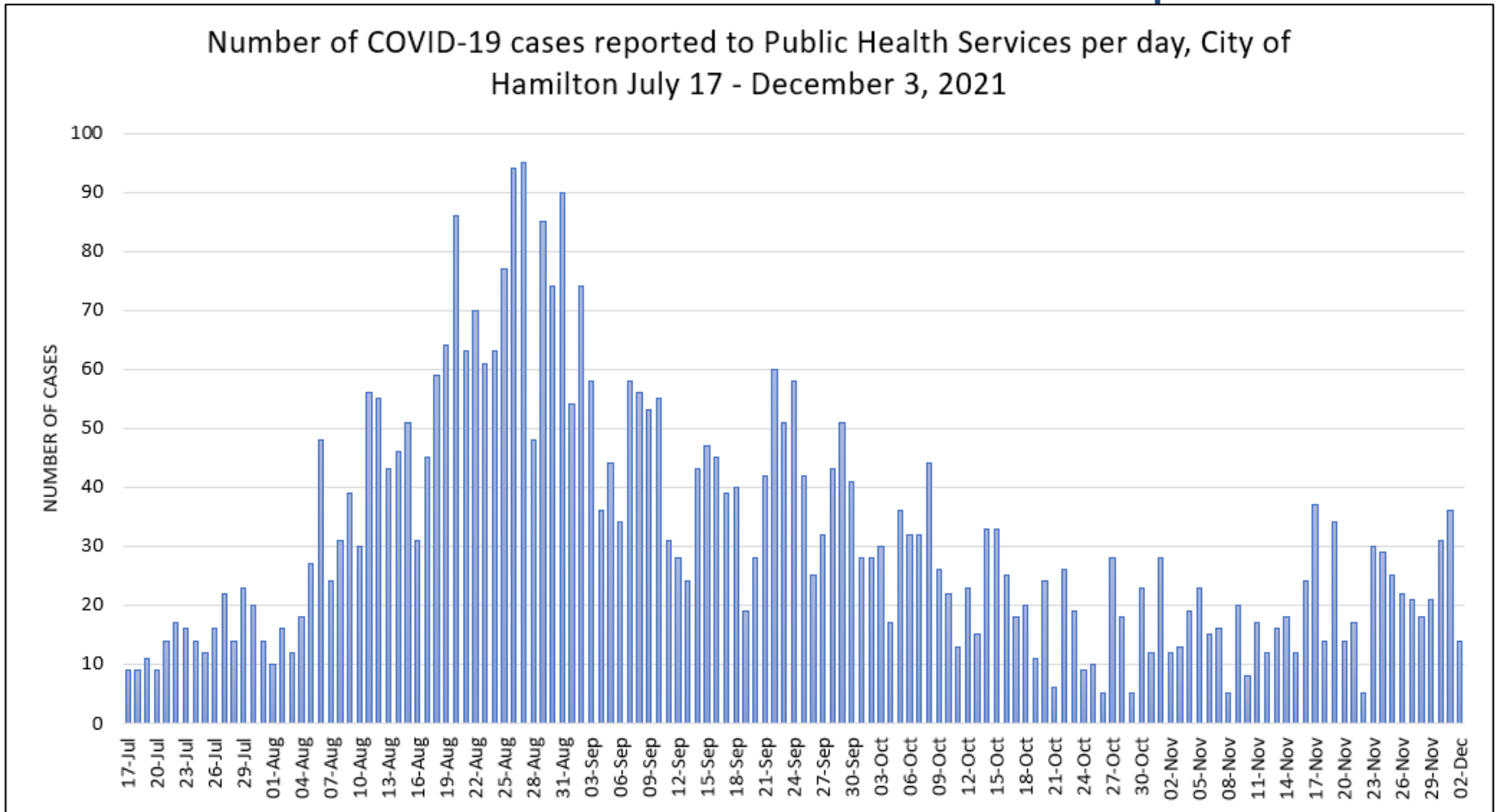
Overall Status

- Case and outbreak activity in Hamilton has been maintaining at current levels for several weeks
- Provincial pause in reopening due to increase in case activity
- As of December 2, 2021: 902,999 doses given; 86.4% of Hamiltonians 12yrs+ vaccinated with one dose and 83.5% with both doses
- Updated Scarsin forecasts indicate that continued use of public health measures (masking and physical distancing) with planned vaccinations can balance some anticipated increases in transmission and keep severe outcomes such as hospital admissions modest
- Control of COVID-19 remains dependent on both vaccination and the practice of public health measures

SITUATION REPORT

Erin Rodenburg, Epidemiologist

Reported Cases



Key Messages

- Hamilton is in Wave 4 of COVID-19 and activity remains stable
- As of December 3, 2021, there were 25 cases of COVID-19 reported to Hamilton Public Health per day on average

Phases of COVID-19 in Hamilton – Wave 4

Phase 1: Pre-peak Jul 17 – Aug 16, 2021 (1 month)

- 757 cases reported
- 14 outbreaks
- 47 hospitalizations and 4 deaths
- Outbreaks occurring in workplace, child care, communal living settings
- Stage 3 – Provincial Roadmap to Reopen
- Vaccine doses administered decreased

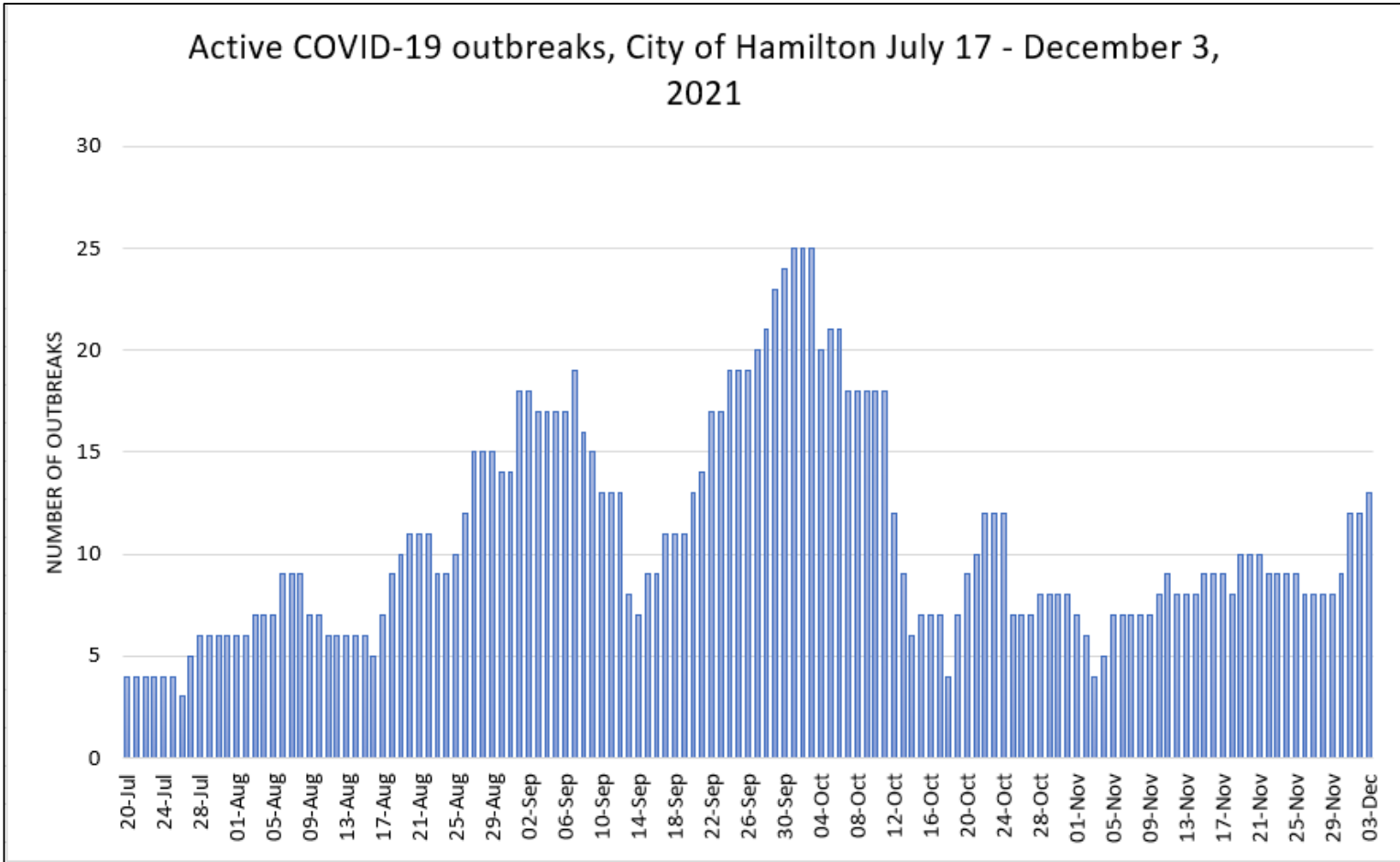
Phase 2: Peak Aug 17 – Sept 1, 2021 (0.5 months)

- 1,128 cases reported
- 22 outbreaks
- 67 hospitalizations and 3 deaths
- Outbreaks occurring in workplace, child care, athletic settings
- Provincial reopening stages paused, maintenance of public health measures
- Introduction of hyper-local vaccine clinics to areas of Hamilton with lower vaccine coverage

Phase 3: Post-peak Sept 2 – Dec 3, 2021 (3 months)

- 2,554 cases reported
- 94 outbreaks
- 140 hospitalizations and 17 deaths
- Outbreaks occurring in workplace, child care, school, athletic, banquet hall, communal living settings
- Increase in indoor activity
- Vaccine passports implemented (ON)
- Increase in provincial cases

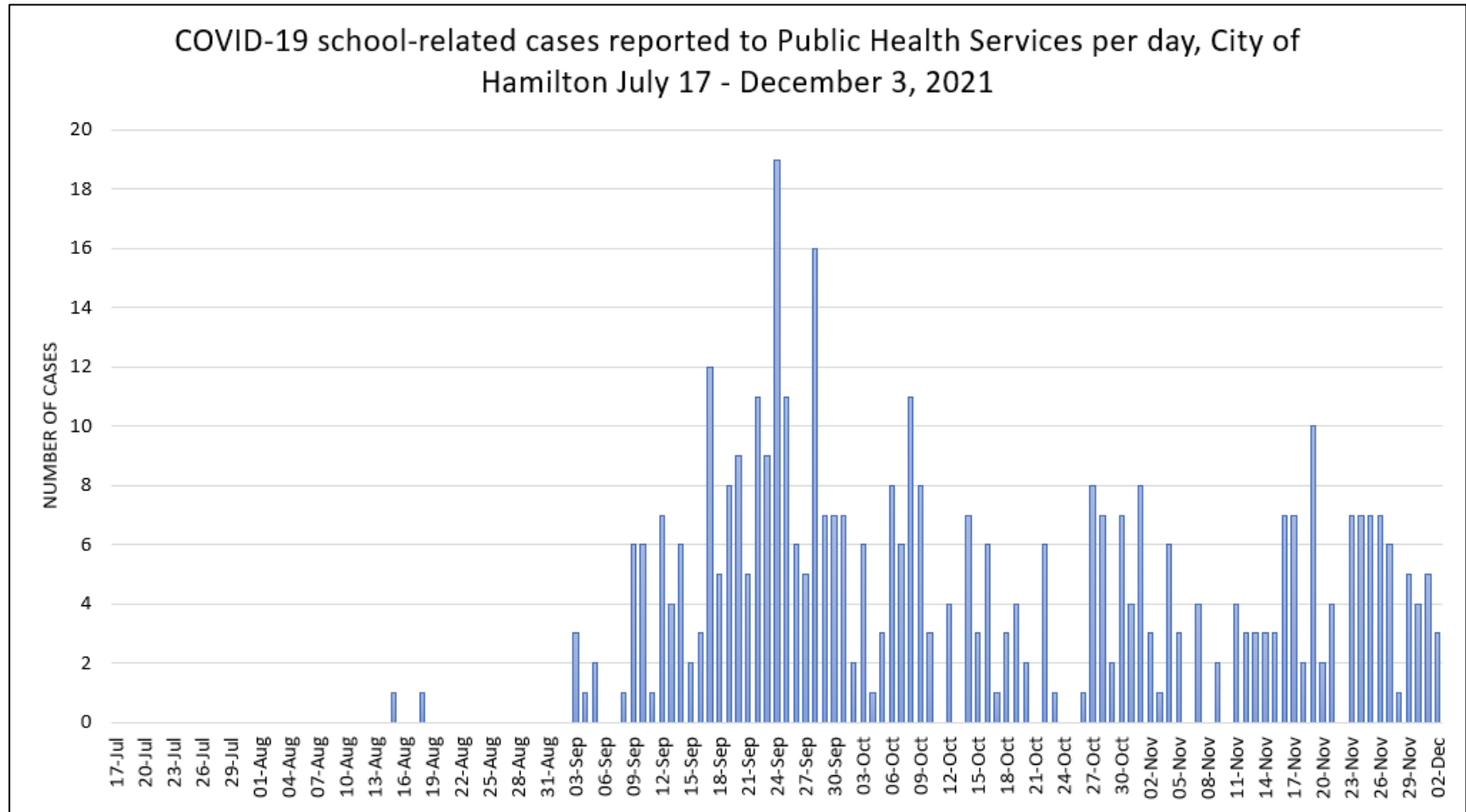
Active Outbreaks



Key Messages

- COVID-19 outbreak activity in Wave 4 peaked in late September/early October 2021
- The number of active COVID-19 outbreaks in recent weeks has been maintaining

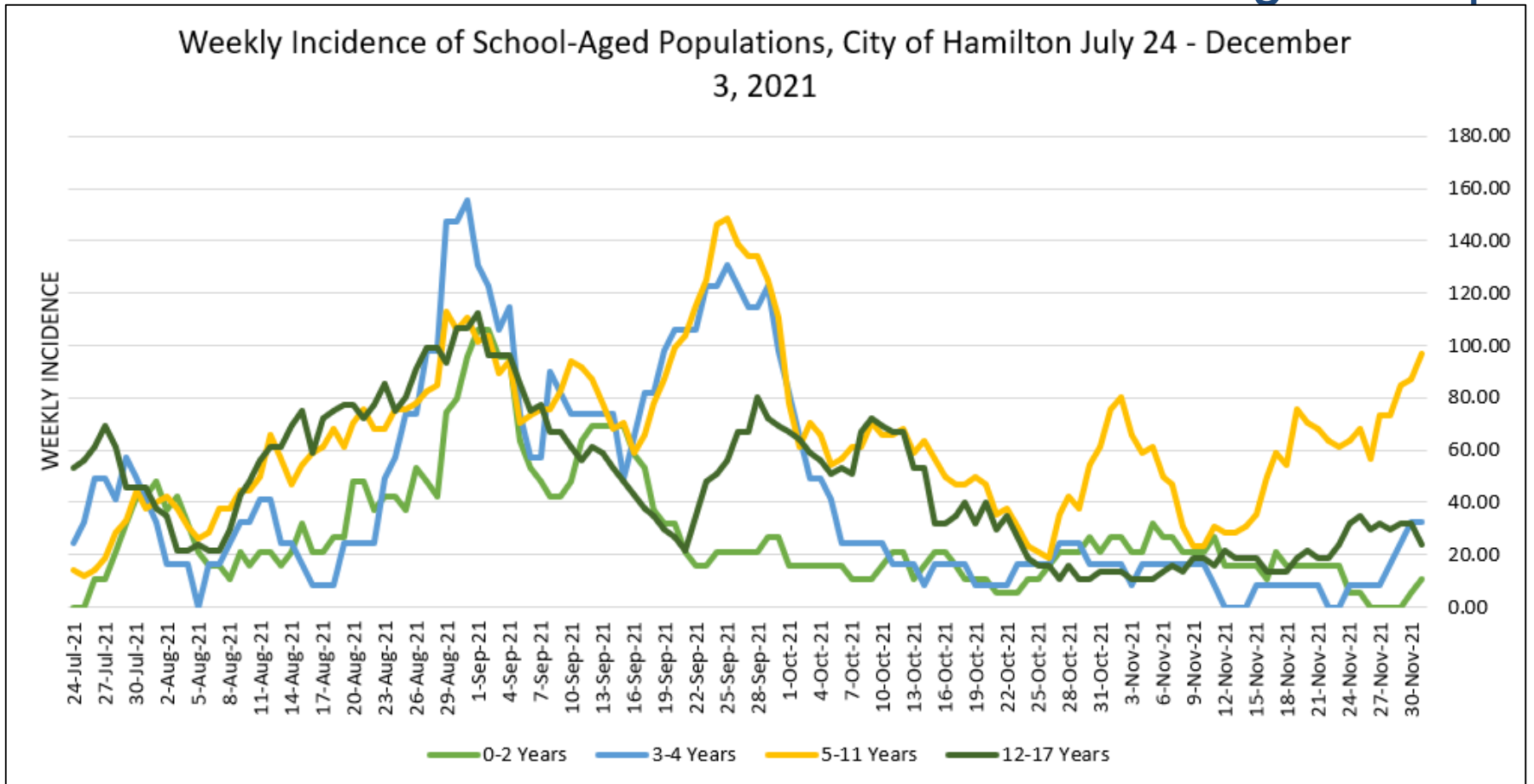
Reported School-Related Cases



Key Messages

- School-related COVID-19 case activity in Hamilton peaked near the end of September 2021
- As of December 3, 2021, school-related case activity is stable around 5 school cases per day

Affected Age Groups



Key Messages

- COVID-19 cases in Hamilton have been predominantly younger individuals, which aligns with the consistent COVID-19 school activity.
- Within the school-aged population, we are seeing the highest incidence in those aged 5-11 years.

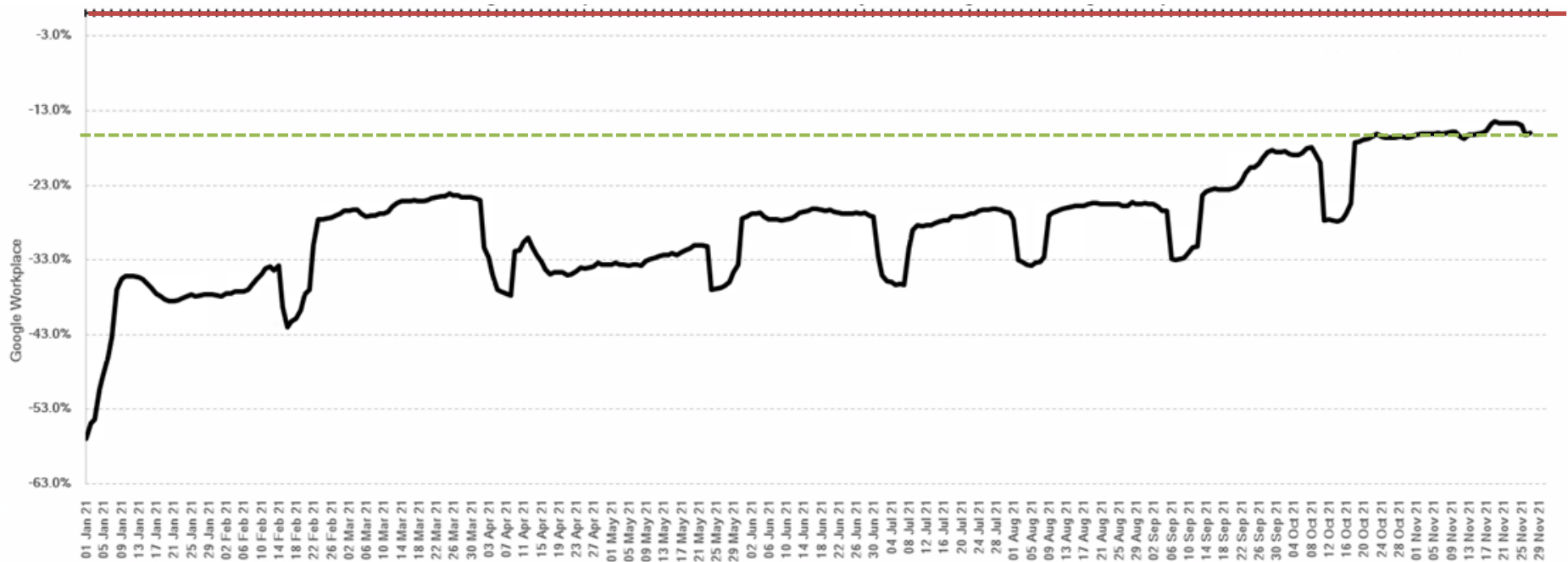
SCARSIN FORECAST

Ruth Sanderson, Epidemiologist

Scarsin Forecast

- Masking and physical distancing remain effective interventions in the control of COVID-19
 - Forecasts, and the ongoing possibility of new variants, illustrate the continued importance of public health measures combined with vaccinations
- Anticipate some increase in cases and hospitalizations this winter; cases and hospitalizations will remain below previous peak levels provided:
 - Our vaccination levels rise with anticipated child vaccination starting last week and achieving 65% first dose coverage of those aged 5-11 years by the end of January 2022
 - Residents' behaviours do not exceed those currently laid out in the reopening plan including lifting of public health measures
 - Delta continues to dominate, and emerging variants do not evade immunity

Workplace Mobility, Hamilton



Data Source: Scarsin Decision Support System retrieved Dec 1, 2021

Key Messages:

Current level is approximately 16% below pre-pandemic levels. Workplace mobility is set in the forecasts to decrease to 12% below pre-pandemic levels by January 6, 2022.

Scarsin Forecast – Overview of Scenarios

Scenario 1 – Maintain Public Health Measures (PHM)

Maintained public health measures (e.g., 70% masking to Jan 31, 2022).

Scenario 2 – Reopening

Reduced avoidance and physical distancing starting Dec 1, 2021, down to 0% by Feb 15, 2022, in community, workplaces, university & school settings. Masking at 60% to end of year then gradually declines to 0% by end of Mar 2022.

Scenarios Assume:

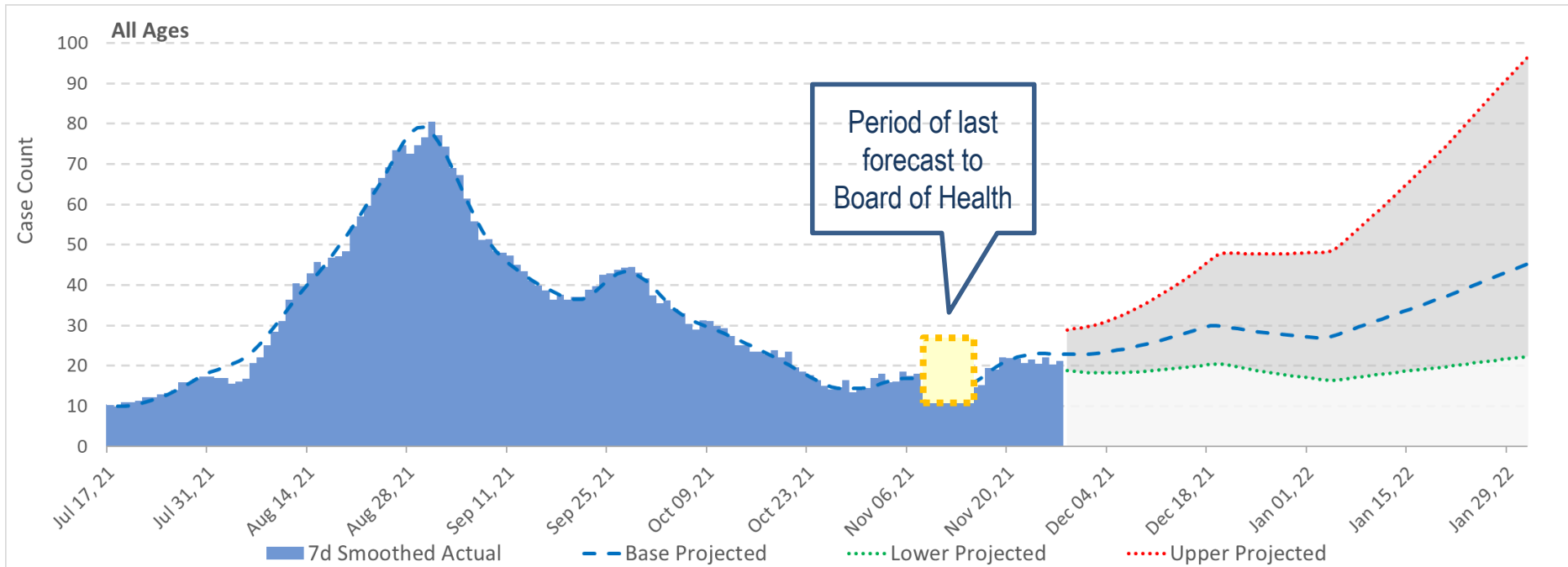
- Increased transmission risk with increased activity
 - indoors due to cooler weather and “reopening” activities
- Delta circulating at 99.5% of cases as of Sep 20, 2021,
 - increased to 99.8% by Nov 30, 2021
- Vaccination of children aged 5-11yrs starting Nov 25, 2021 achieving 50% first dose vaccination by end of Dec 2021, and 65% by end of Jan 2022. Dose interval set at 8 weeks
- Continued first dose vaccination of those aged 12yrs+
- Maintained workplace mobility after Oct 2, 2021, so that
 - it decreases to 12% below pre-pandemic levels by Jan 9, 2022; community mobility at 1% by Dec 31, 2021
- Immunity curves adjusted for vaccine type
- First dose immunity adjusted for Delta
- Reduced dosing interval to four weeks for 12yrs+ in Jul 2021

-Updated Data:

- Case data retrieved Mon, Nov 29, 2021
- Updated mobility data
- Vaccination data retrieved Mon, Nov 29, 2021
- Updated population data to 2021 StatsCan, Pop Estimates

Scarsin Forecast

Scenario 2 - Reopening: COVID-19 Cases Among Hamiltonians



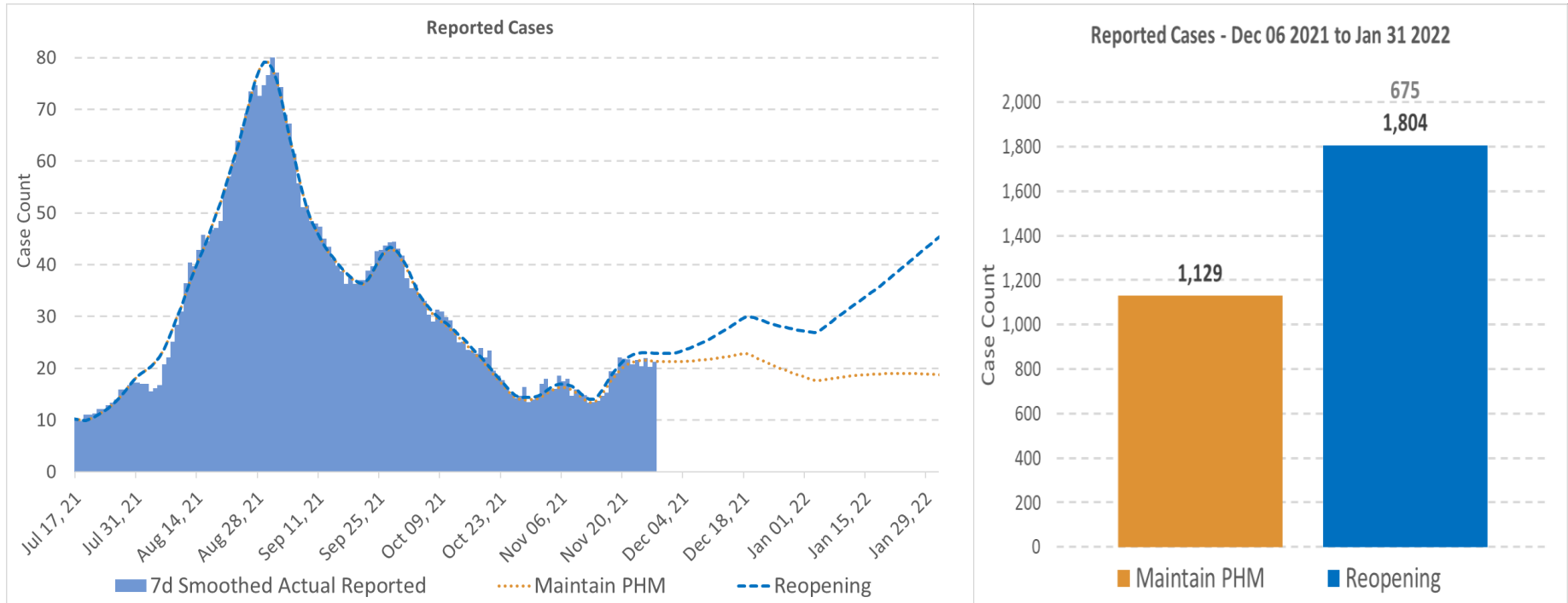
Data Source: Scarsin Decision Support System retrieved Nov 30, 2021

Key Messages:

Scenario 2 - Reopening predicts case increase. Winter brings added transmission risk with increased indoor activity and “reopening.” Cases are forecast to remain below 45 per day but could get as high as 95 at the peak or stay below 20 cases on average. A third of cases will be in those aged 0-19 years (36%) and half will be in those 20-59 years (54%).

Scarsin Forecast

Scenario Comparisons, COVID-19 Cases Among Hamiltonians



Data Source: Scarsin Decision Support System retrieved Nov 30, 2021

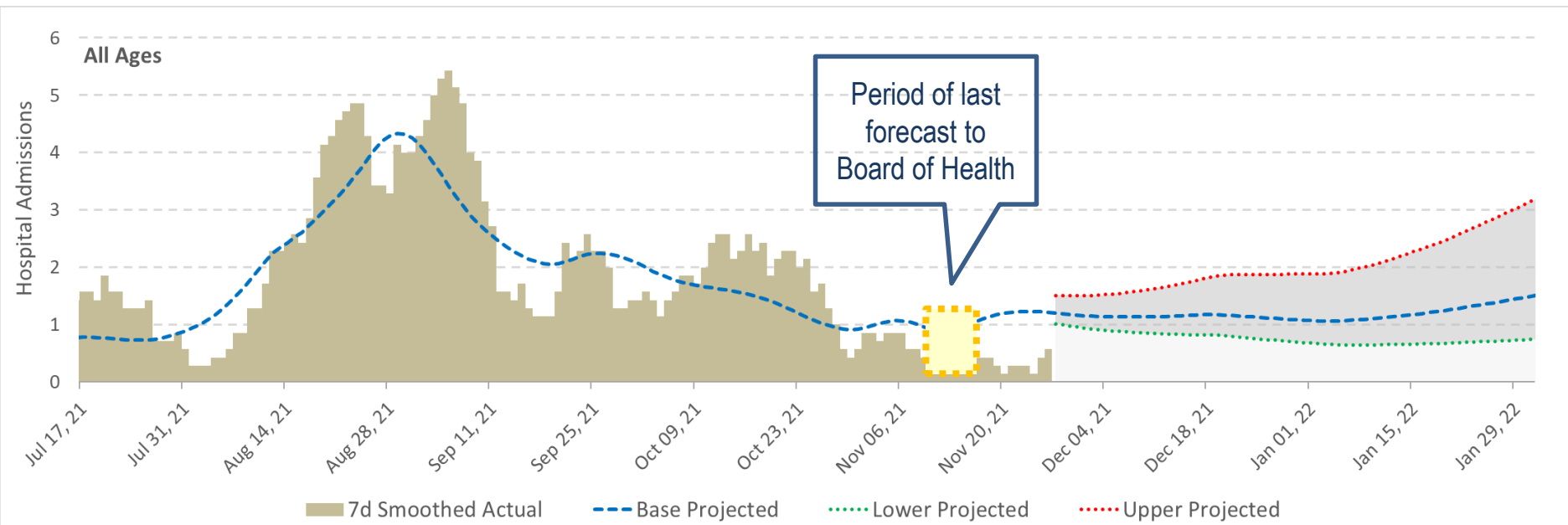
Key Messages:

Scenario 1 - Maintaining Public Health Measures is forecast to keep cases low. Cases could quickly increase with reopening and reduced public health measures as **Scenario 2** forecasts 675 additional cases between December 6, 2021 – January 31, 2022.

Note: PHM – Public Health Measures

Scarsin Forecast

Scenario 2 Reopening: COVID-19 Hospital Admissions Among Hamiltonians



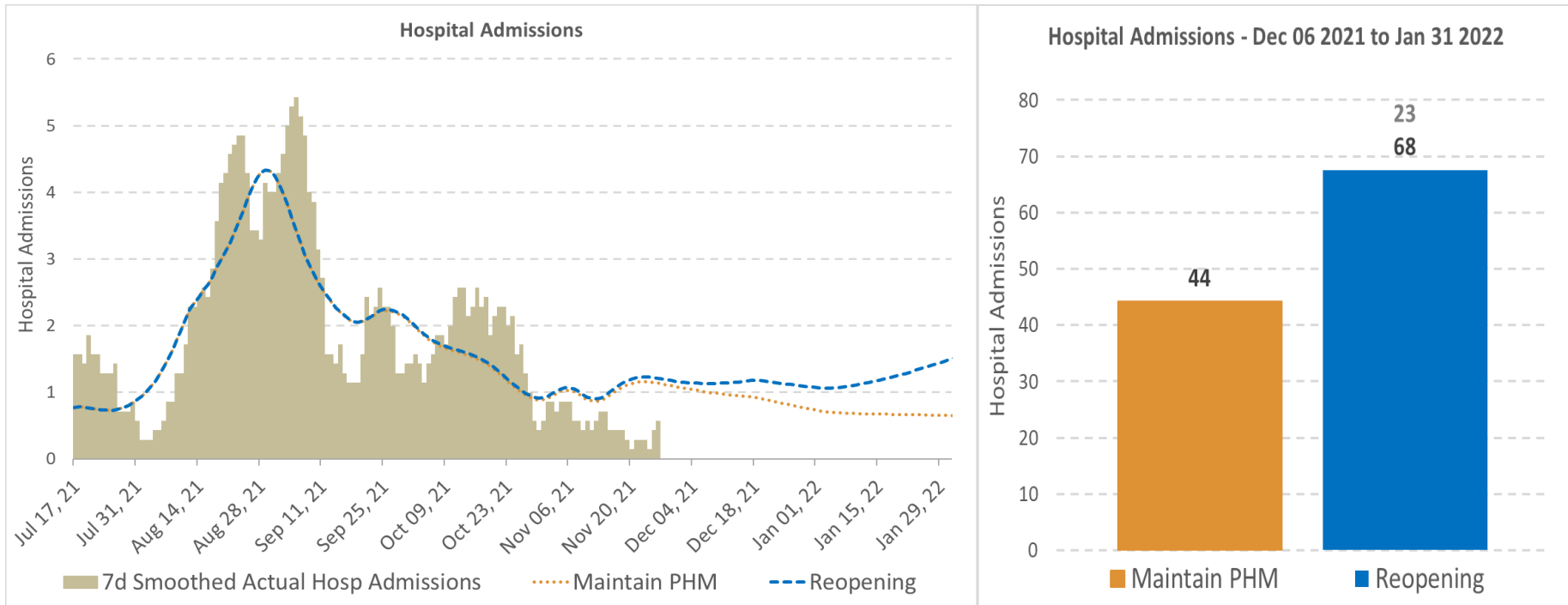
Data Source: Scarsin Decision Support System retrieved Nov 30, 2021

Key Messages:

With [Scenario 2 - Reopening](#), hospital admissions for Hamiltonians are predicted to peak at just above one admission per day on average for from now to the end of the year (range 0.5–3.5 at peak).

Scarsin Forecast

Scenario Comparisons, COVID-19 Hospital Admissions Among Hamiltonians



Data Source: Scarsin Decision Support System retrieved Nov 30, 2021

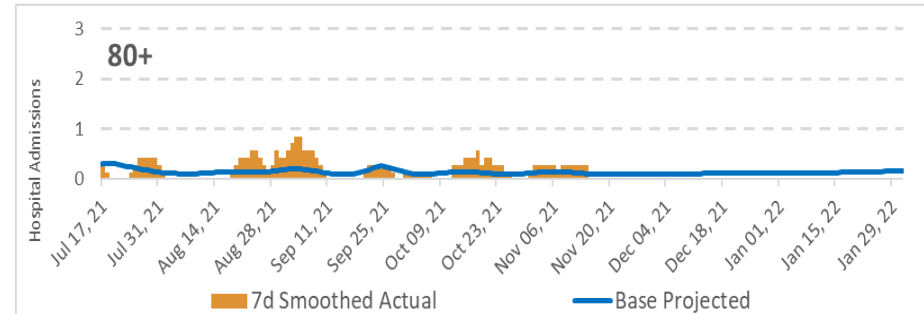
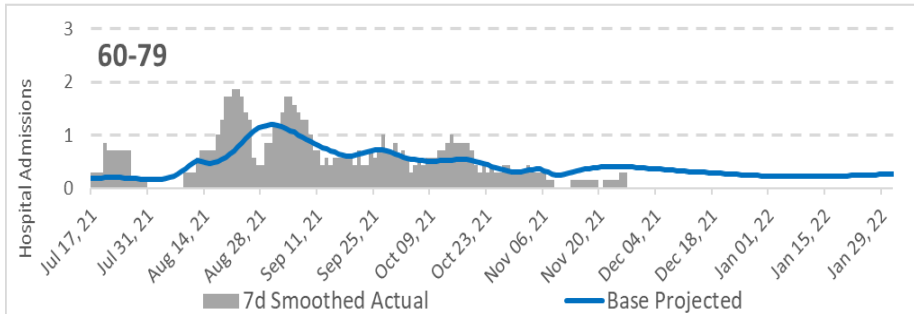
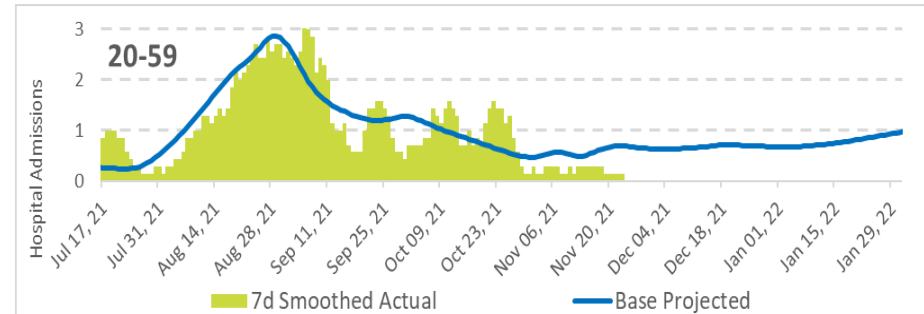
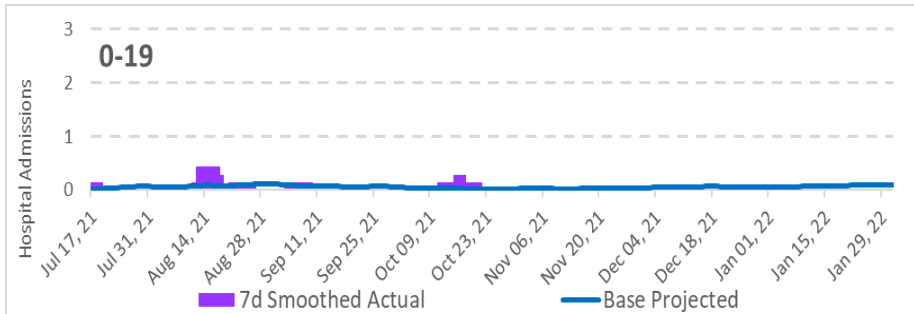
Key Messages:

Scenario 1 - Maintaining Public Health Measures is the better scenario. **Scenario 2 - Reopening** predicts an additional 23 new hospital admissions for Hamiltonians between December 6, 2021 – January 31, 2022. A total of 68 new hospital admissions of Hamiltonians is predicted between December 6, 2021 – January 31, 2022.

Note: PHM – Public Health Measures

Scarsin Forecast

Scenario 2: Reopening, COVID-19 Hospital Admissions Among Hamiltonians



Data Source: Scarsin Decision Support System retrieved Nov 30, 2021

Key Messages:

Cases will be primarily in younger age groups; hospital admissions will be primarily in those 20-59 years old (62%) and those 60-79 (21%) years old. Anticipate seven deaths between December 6, 2021 – January 31, 2022; primarily in those ≥ 60 years old (71%; not shown).

Scarsin Forecast Summary

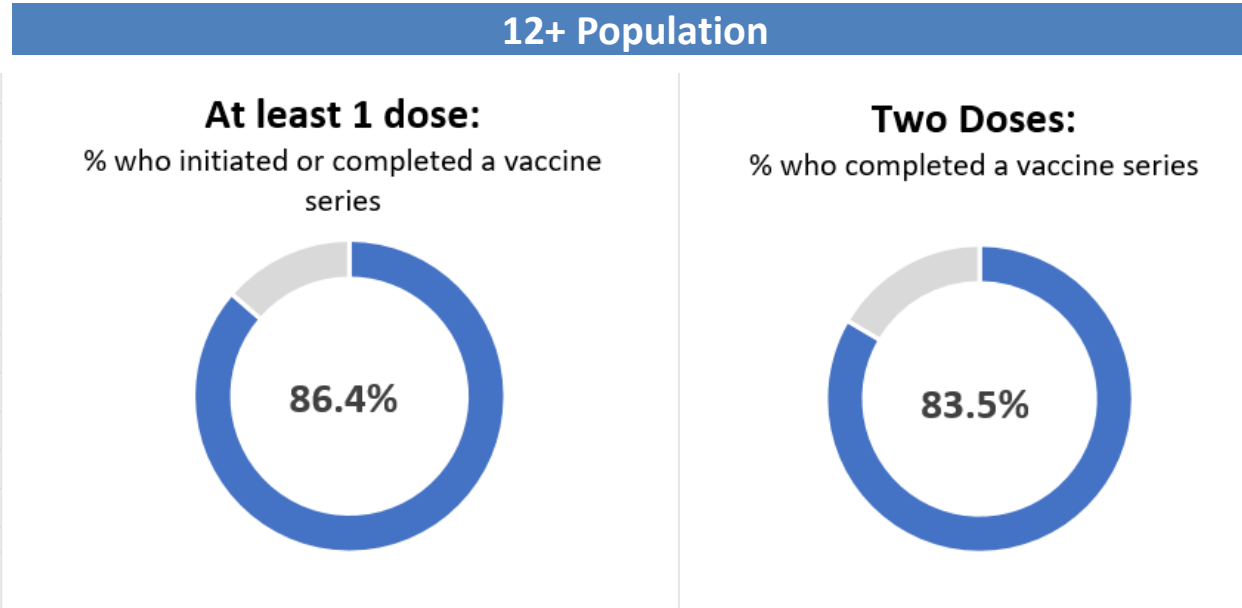
- Hamilton's forecasts indicate continued use of public health measures (masking and physical distancing) with planned vaccinations can balance some anticipated increase in transmission
- Future forecasts will be adjusted as more information becomes available

COVID VACCINE UPDATE

Melissa Biksa, Manager – COVID-19 Vaccine

COVID-19 Vaccine – Overall Coverage

Estimated as of End Of Day December 2, 2021



Note: Includes Hamilton residents and individuals vaccinated in Hamilton who cannot be assigned to a health unit region.

The 12yrs+ population includes individuals born in 2009 or earlier.

Sources: IntelliHealth (COVAXon Data Load); IntelliHealth (Population Projections, 2020).

COVID-19 Vaccine – Overall Coverage

Estimated as of End Of Day December 2, 2021

	Previous (Nov 19)	Previous (Nov 26)	CURRENT (Dec 3)	Trend
% change in 1 st dose coverage among Hamilton's 12+ year old population in the past week	85.9% (+0.3%)	86.2% (+0.3%)	86.4% (+0.2%)	--
% change in 2 nd dose coverage among Hamilton's 12+ year old population in the past week	82.7% (+0.5%)	83.1% (+0.4%)	83.5% (+0.4%)	--
# of 1 st doses administered to Hamilton's 5+ year old population in the past week	1,233	1,729	5,475	↑
# of 2 nd doses administered to Hamilton's 5+ year old population in the past week	2,425	1,912	1,468	↓
# of 3 rd doses administered to Hamilton's 5+ year old population in the past week	3,699	5,565	8,343	↑

1st doses remaining to achieve 90% coverage among Hamilton's 12+ year old population: **18,864**

33,092

18,864

44,059

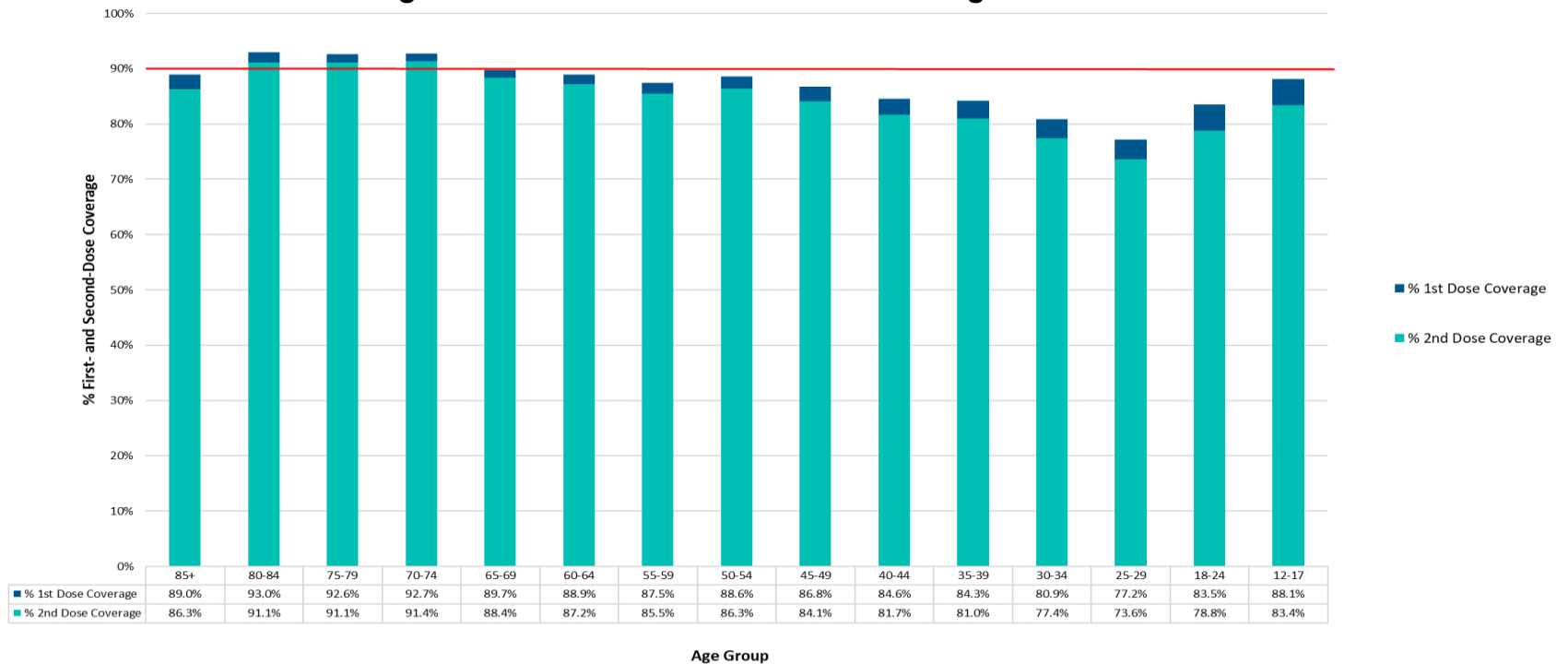
33,875

Sources: IntelliHealth (COVAXon Data Load); IntelliHealth (Population Projections, 2020).

COVID-19 Vaccine – Coverage by Age

Estimated as of End Of Day December 2, 2021

Aged-Based COVID-19 Vaccine Coverage

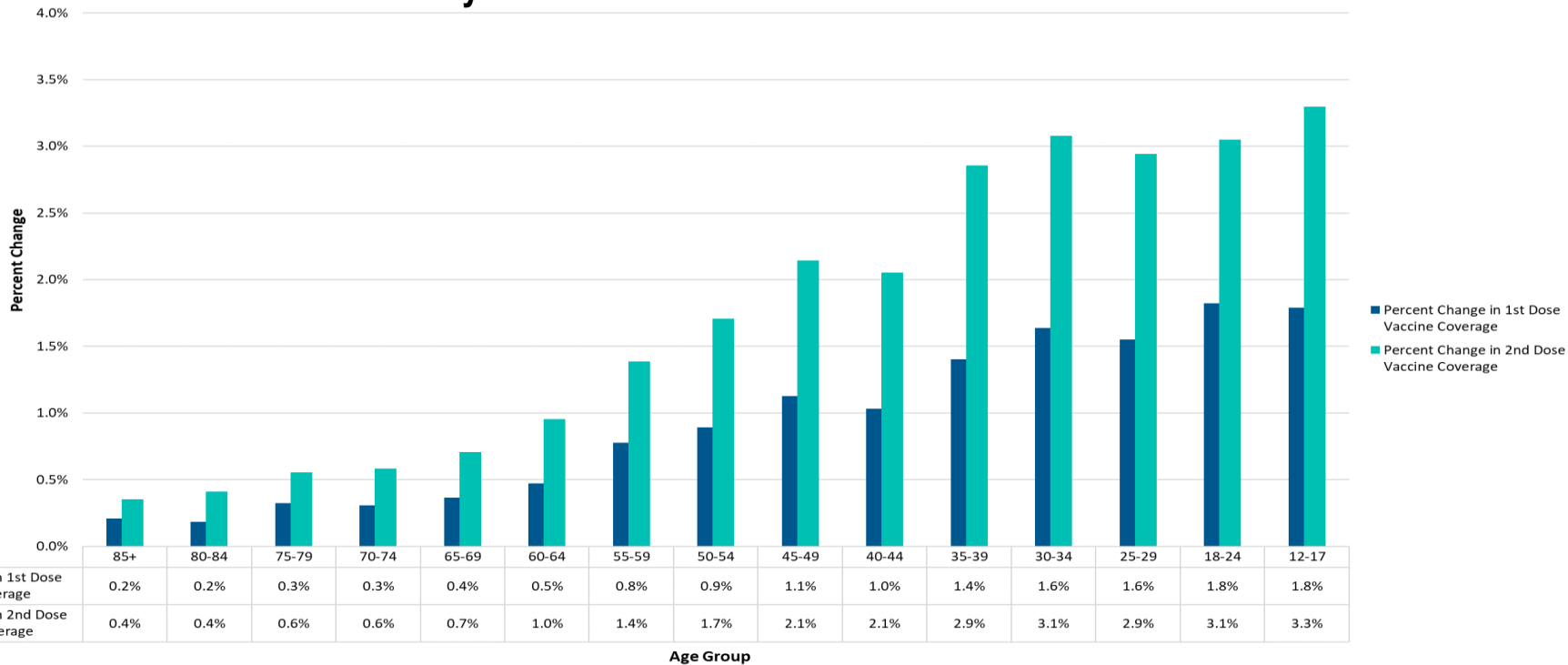


Sources: IntelliHealth (COVAXon Data Load); IntelliHealth (Population Projections, 2020).

COVID-19 Vaccine – Coverage by Age

Estimated as of End Of Day December 2, 2021

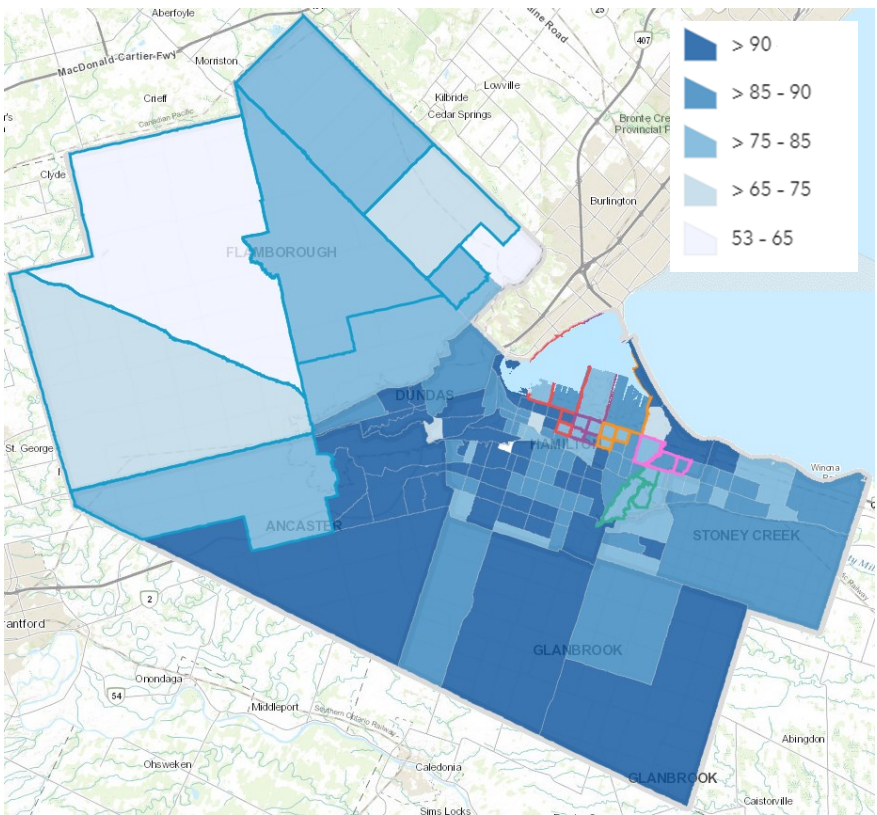
Percent Change in COVID-19 Vaccine Coverage by 1st and 2nd Dose in the Past Month



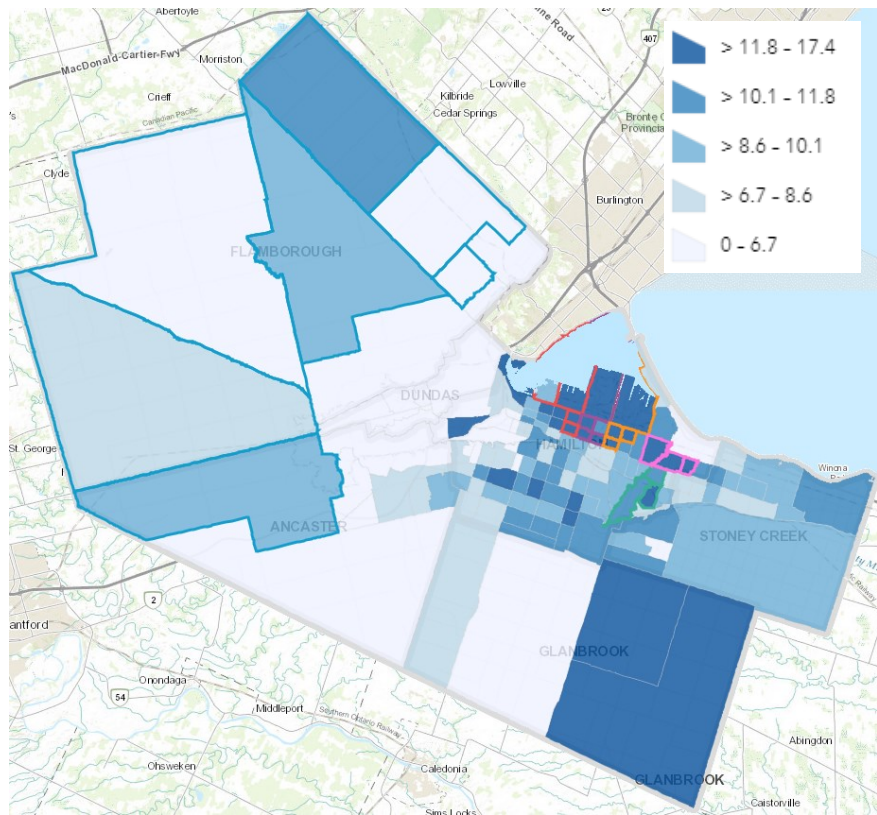
Sources: IntelliHealth (COVAXon Data Load); IntelliHealth (Population Projections, 2020).

COVID-19 Vaccine – Coverage by Census Tracts (“neighbourhoods”)

Estimated \geq One Dose Coverage Among Eligible Population (up to November 29, 2021)

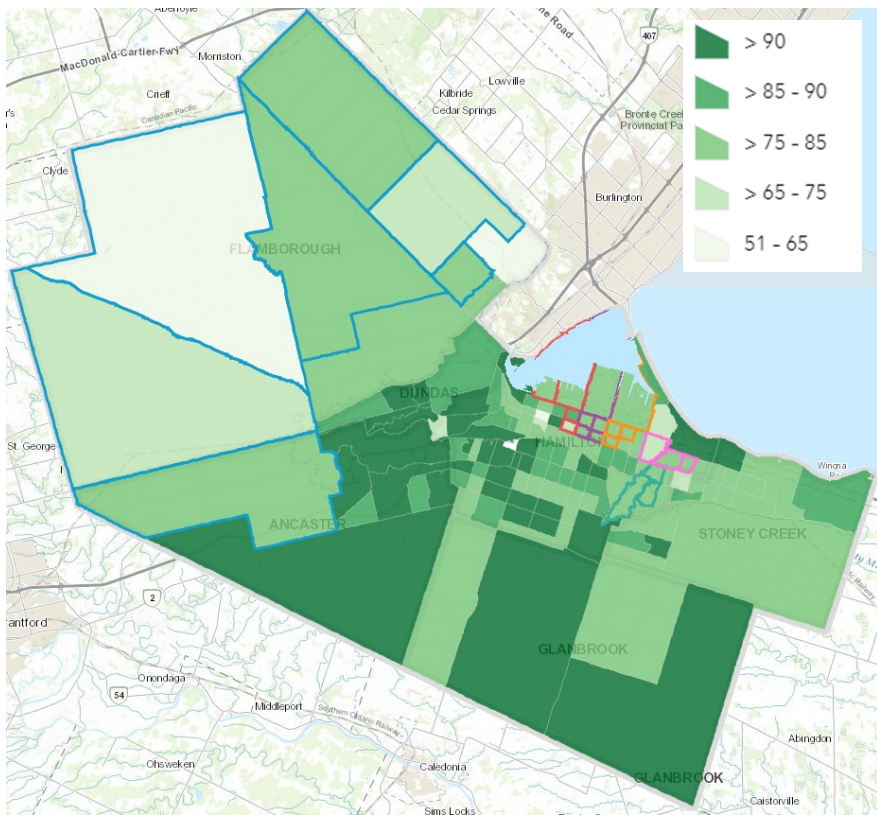


Change in \geq One Dose Coverage Among Eligible Population (August 5 – November 29, 2021)

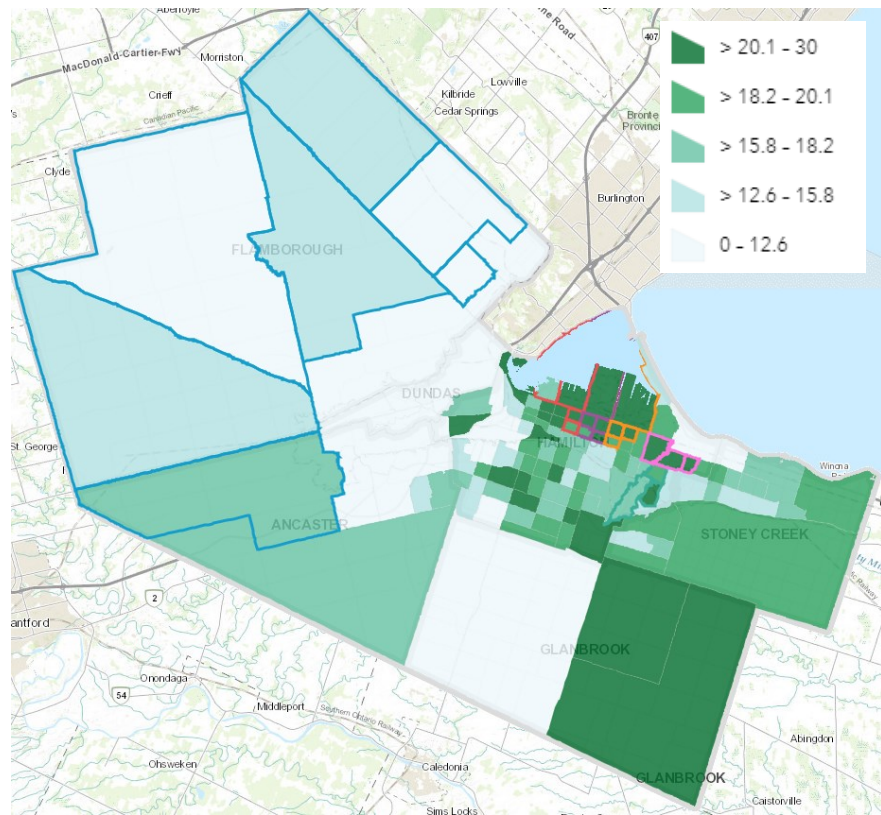


COVID-19 Vaccine – Coverage by Census Tracts (“neighbourhoods”)

Estimated Two Dose Coverage Among Eligible Population (up to November 29, 2021)



Change in Two Dose Coverage Among Eligible Population (August 5 – November 29, 2021)



COVID-19 Vaccine – Pediatric Population

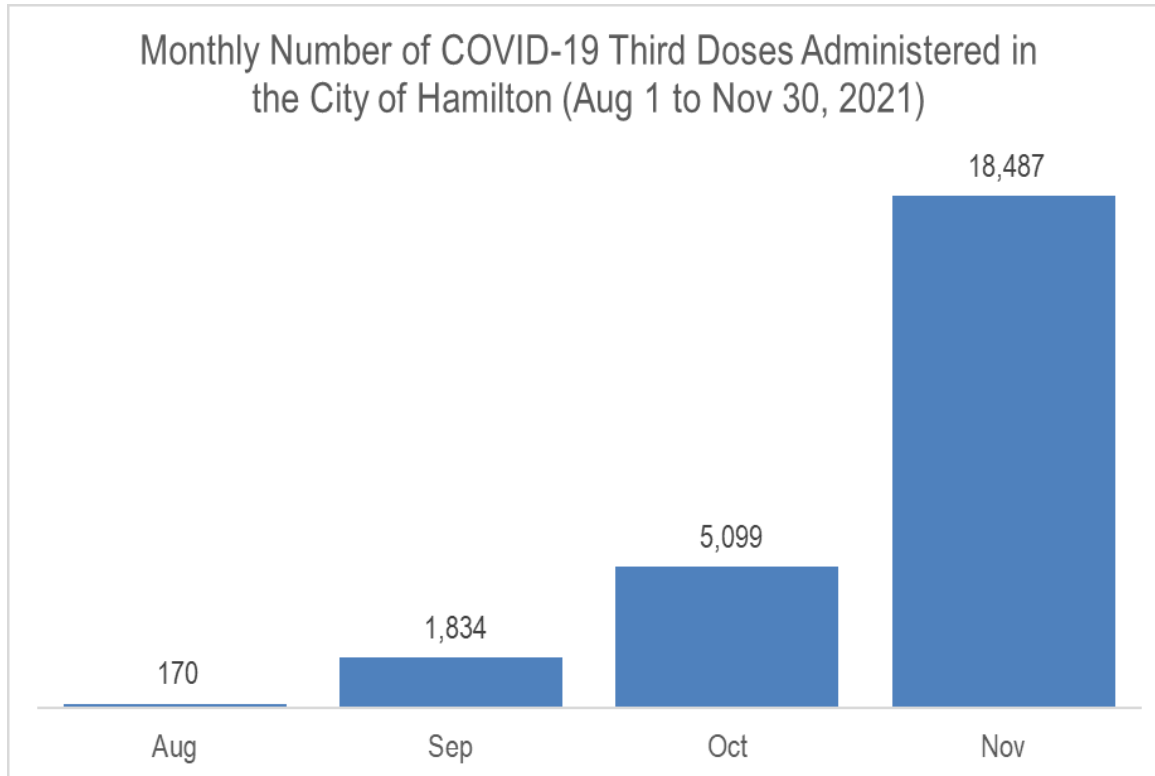
Estimated as of End Of Day December 2, 2021

- Over **5,400** 1st doses have been administered to 5 to 11 years old children residing in Hamilton
- Over **4,700** appointments scheduled at Hamilton clinics between December 3 and December 17, 2021
 - Most at Mountain Vaccine Clinic (LimeRidge Mall), the Centre on Barton, and David Braley Health Sciences Centre Vaccine Clinic
- Combined, represents nearly a quarter of the 5 to 11 years old population in Hamilton

Sources: IntelliHealth (COVAXon Data Load); Hamilton Verto Flow.

COVID-19 Vaccine – Third Doses

Estimated as of End Of Day November 30, 2021



Over **25,000** third doses administered in the City of Hamilton

Administered at various locations with largest volumes in pharmacy, long-term care and retirement homes and public health fixed site clinics

Expecting further increases in December 2021

Sources: IntelliHealth (COVAXon Data Load)

COVID-19 Vaccine – Operational Priorities

- Main Priority – 1st & 2nd Doses (Including 5 to 11 year old children)
 - Secondary Priority – 3rd & Booster Doses
- Key Messages
 - 1st/2nd Doses – Robust & persistent protection
 - 3rd Doses – Recommended, but not mandatory
 - Individuals 50+ years old eligible December 13, 2021

COVID-19 Vaccine - Pediatric Population Overview

- Key Details
 - 5 to 11 year old children
 - 8-week interval
- Booking - Appointments Only
 - Online through City of Hamilton website
 - COVID-19 Vaccine Hotline
- Channels



Pediatric Population – Vaccine Confidence

School- & Community-Based Vaccine Clinics

Healthcare Provider Recommendations

School- & Community-Based Health Communication Campaigns



MINIMAL CONTACT COVID-19 VACCINE INTERVENTION QUICK REFERENCE TOOL

Ask at Every Visit The 4A Model

ASK Identify and assess needs. Consider the patient's perspective. **ADVISE** Communicate with other healthcare providers. **ASSESS** Assess the patient's understanding of COVID-19 and vaccine confidence. **ASSIST** Help the patient understand and address their needs. Offer support and resources. Encourage the patient to ask questions and express their concerns.

COVID-19 Vaccine Safety & Impact

- All COVID-19 vaccines are safe and effective.
- All vaccine providers should provide COVID-19 vaccine to eligible patients. The only vaccine for the young (12-17 years old) is the Pfizer-BioNTech COVID-19 vaccine.

Booking Information

- COVID-19 vaccine appointments are available at all ages (12-17 years old).
- Bookings are available for 12 months at the time of booking.

Where COVID-19 vaccine is available

- Community health centres
- Pharmacies
- Other locations

Find out where COVID-19 vaccine is available

- Visit www.hamilton.ca/healthcare
- Call 905-977-8488
- Other locations in 100 languages

COVID-19 Vaccine Intervention - Quick Reference Tool

Frequently Asked Questions

What is the purpose of the COVID-19 vaccine intervention?

The purpose of the COVID-19 vaccine intervention is to help patients understand and address their needs. It is a resource that provides information and support to patients. When your vaccine session will address the needs and concerns of COVID-19.

When should I get the COVID-19 vaccine?

You should get the COVID-19 vaccine as soon as you are eligible. The program on COVID-19 vaccine is ongoing and will be updated as more information becomes available.

What are the benefits of the COVID-19 vaccine?

The COVID-19 vaccine can help prevent you from getting COVID-19. It can also help reduce the severity of the illness if you do get it. The vaccine can also help reduce the risk of hospitalization and death.

What are the risks of the COVID-19 vaccine?

The COVID-19 vaccine is safe and effective. There are no known risks of the vaccine. The vaccine is made from a weakened virus that cannot cause COVID-19.

What if I have concerns about the COVID-19 vaccine?

If you have concerns about the COVID-19 vaccine, please talk to your healthcare provider. They can help you understand the vaccine and address your concerns.

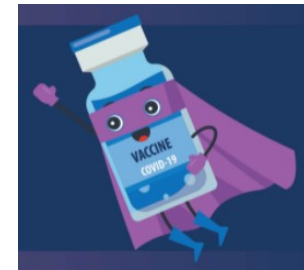
How can I get the COVID-19 vaccine?

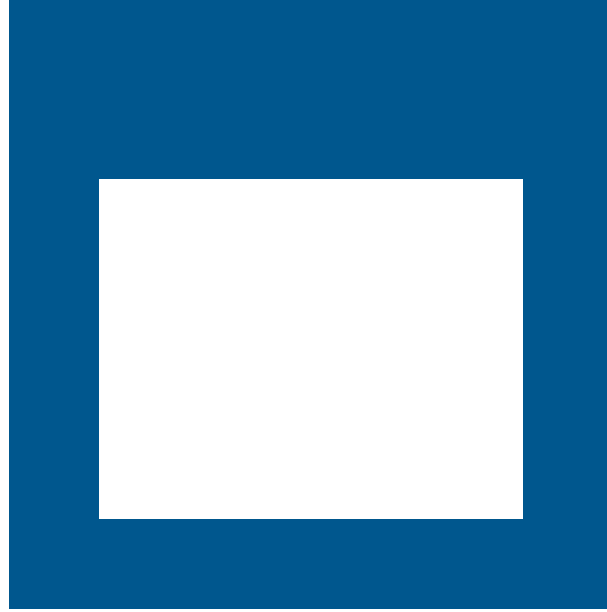
You can get the COVID-19 vaccine at a community health centre, pharmacy, or other location. You can also book an appointment online.

What if I am unable to get the COVID-19 vaccine?

If you are unable to get the COVID-19 vaccine, please contact your healthcare provider for more information.

Hamilton





QUESTIONS?